PHASED ARRAY RADAR INNOVATIVE SENSING EXPERIMENT
13 – 16 April 2010 Summary

Pamela Heinselman

The goal of the 2010 PARISE is to gain an understanding of the impact of temporal sampling on warning decision making, and warning lead time. During the first week, 13–16 April 2010, four NWS forecasters from the Southern Region, Eastern Region, and Central Region helped us address this goal by applying their warning decision expertise to five different playback cases sampled by the National Weather Radar Testbed Phased Array Radar (NWRT PAR). The forecasters worked each case in teams of two.

Before each case, forecasters developed situational awareness of the forcing mechanisms and near-storm environment in which the storms developed. This situational awareness allowed them to form a conceptual model of the storm type and severe weather threats they anticipated. Then they applied their warning decision expertise to interrogate the NWRT PAR data using the Warning Decision Support System – Integrated Information, and to issue warnings using a WarnGen tool similar to the one in AWIPS. After each case, the teams discussed their warning decision process with a PAR scientist. The case culminated with an overview of any severe weather that occurred, so that forecasters could self-evaluate their warning process.

The experiment wrapped up with a group discussion on participant's experiences with NWRT PAR data and the PARISE as a whole. Forecasters said that they had a good experience and will encourage others at their office to participate next year. They enjoyed getting to work with rapid update data and experiencing how those data may change their current warning decision process. Forecasters also enjoyed getting to work with researchers and people from other NWSFOs.

Following analysis of the data collected during PARISE 2010, findings will be shared initially via conference papers in Fall 2010.